



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,640	11/24/2003	Koji Shigemura	1670.1019	1164
49455 7590 09/11/2007 STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER WALFORD, NATALIE K	
			ART UNIT 2879	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/718,640

Applicant(s)

SHIGEMURA ET AL.

Examiner

Natalie K. Walford

Art Unit

2879

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 and 49-56 is/are pending in the application.
- 4a) Of the above claim(s) 7-9,24,25,31-33 and 39-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-23, 26-30, 34-38, and 49-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

The Remarks, filed on May 21, 2007, has been entered and acknowledged by the Examiner. Claims 1-41 and 49-56 are pending in the instant application.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 49-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizuguchi et al. (JP 10-008239).

Regarding claim 1, Mizuguchi discloses an evaporation mask (item 16) formed of a thin film in figures 1-3, wherein the evaporation mask is drawn taut by application of tension (paragraphs 6-13) and comprises: at least one mask unit (items 20, 26, and 28), comprising: a plurality of main apertures (item 20), and a plurality of first dummy apertures (items 26 and 28) formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask.

Regarding claim 2, Mizuguchi discloses the evaporation mask of claim 1, wherein the main apertures form an effective deposition area, and the first dummy apertures form an ineffective deposition area (see FIGS. 1-3 and paragraph 1).

Regarding claim 3, Mizuguchi discloses the evaporation mask of claim 2, wherein at least one of the first dummy apertures is formed parallel to the main apertures, and at least another one of the first dummy apertures is formed perpendicular to the main apertures (see FIGS. 1-3).

Regarding claim 4, Mizuguchi discloses the evaporation mask of claim 2, comprising at least two mask units (items 20, 26, and 28), and further comprising a plurality of second dummy apertures (items 26 and 28) formed outside and adjacent to the outermost mask units in the direction in which tension is applied to the evaporation mask (paragraphs 6-13).

Regarding claim 5, Mizuguchi discloses the evaporation mask of claim 4, wherein the second dummy apertures are formed outside the effective deposition areas where the mask units are formed (see FIGS. 1-3).

Regarding claim 6, Mizuguchi discloses the evaporation mask of claim 4, wherein at least one of the second dummy apertures is formed parallel to the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures (see FIGS. 1-3).

Regarding claim 49, Mizuguchi discloses an evaporation mask formed (item 16) of a thin film in figures 1-3, wherein the evaporation mask is drawn taut by application of tension (paragraphs 6-13), the evaporation mask comprising: at least one mask unit (items 20, 26, and 28) comprising: at least one main aperture (item 20), and at least one first dummy aperture (items 26 and 28) formed adjacent to an outermost at least one main aperture in a direction in which tension is applied to the evaporation mask.

Regarding claim 50, Mizuguchi discloses the evaporation mask of claim 49, further comprising at least one second dummy aperture (items 26 and 28) formed outside and adjacent to

Art Unit: 2879

the outermost at least one mask unit in the direction in which tension is applied to the evaporation mask.

Regarding claim 51, Mizuguchi discloses a mask unit in figures 1-3 for an evaporation mask (item 16), comprising: a main aperture (item 20); and a dummy aperture (items 26 and 28); wherein the dummy aperture prevents the main aperture from being deformed by tension applied to the evaporation mask (paragraphs 6-13).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-23, 26-30, 34-38, and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (US PUB 2001/00198707) in view of Mizuguchi et al. (JP 10-008239) in further view of Kim et al. (US PUB 2003/0111957).

Regarding claim 10, Yamada discloses a method of manufacturing an organic electroluminescent (EL) device in figure 6, the method comprising: forming first electrodes (items 61R, 61G, 61B) on a substrate (item 10); disposing an evaporation mask (item 100) to form an organic film over the substrate; forming the organic film comprising an effective luminescent area to cover at least the first electrodes by evaporating an organic material containing an organic luminescent material through the main apertures (paragraph 62-63), but does not expressly disclose that the evaporation mask is drawn taut by application of tension and

Art Unit: 2879

having at least one mask unit, the mask unit comprising a plurality of main apertures and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask, forming a first dummy pattern area outside the effective luminescent area through the first dummy apertures, and forming second electrodes on the organic film so that the effective luminescent area is formed at an area where the first and second electrodes overlap; and sealing the resulting structure, as claimed by Applicant.

Mizuguchi is cited to show an evaporation mask (item 16) in figures 1-3 that is drawn taut by application of tension (paragraphs 6-13) and having at least one mask unit (items 20, 26, and 28), the mask unit comprising a plurality of main apertures (item 20) and a plurality of first dummy apertures (items 26 and 28) formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask, forming a first dummy pattern area (items 26 and 28) outside the effective luminescent area through the first dummy apertures. Mizuguchi teaches that with the structure of the mask as described, that a proper electrode pattern can be obtained (paragraphs 6-13). Kim is cited to show an organic electroluminescent device with a second electrode formed on an organic film (paragraphs 78-79) and the structure is then sealed (item 40). Kim teaches that by using a deposition mask, damage can be prevented to layers, short-circuit prevented between layers, and preventing deterioration of layer characteristics (paragraphs 24-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yamada's invention to include the evaporation mask is drawn taut by application of tension and having at least one mask unit, the mask unit comprising a

plurality of main apertures and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask, forming a first dummy pattern area outside the effective luminescent area through the first dummy apertures, and forming second electrodes on the organic film so that the effective luminescent area is formed at an area where the first and second electrodes overlap; and sealing the resulting structure as suggested by Mizuguchi and Kim for obtaining a proper electrode pattern and preventing damage to the device.

Regarding claim 11, the combined reference of Yamada, Mizuguchi and Kim disclose the method of claim 10, wherein at least one of the first dummy apertures is formed parallel to the main apertures, and at least another one of the first dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 12, the combined reference of Yamada, Mizuguchi and Kim disclose the method of claim 10, wherein at least two organic EL devices are manufactured in a single process (Yamada; paragraphs 62-64), and the evaporation mask comprises at least two mask units (Mizuguchi; items 20, 26, and 28), through each of which the organic film of a single organic EL device can be deposited, and a plurality of second dummy apertures outside and adjacent to outermost ones of the mask units in the direction in which tension is applied to the evaporation mask (Mizuguchi; paragraphs 6-13).

Regarding claim 13, the combined reference of Yamada, Mizuguchi and Kim disclose the method of claim 12, wherein the second dummy apertures of the evaporation mask are located outside the effective luminescent areas of the organic EL devices that are deposited by the outermost mask units adjacent to the second dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 14, the combined reference of Yamada, Mizuguchi and Kim disclose the method of claim 12, wherein at least one of the second dummy apertures is formed parallel to the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 15, the combined reference of Yamada, Mizuguchi and Kim disclose the method of claim 10, wherein in forming the second electrodes, an evaporation mask to form the second electrodes is disposed over the substrate (Kim; FIG. 6), the evaporation mask drawn taut by application of tension and having at least one mask unit (Mizuguchi; paragraphs 6-13 and items 20, 26, and 28), the mask unit comprising a plurality of main apertures (item 20) and a plurality of first dummy apertures (items 26 and 28) formed adjacent to the outermost main apertures in the direction in which tension is applied to the evaporation mask, the second electrodes are formed on the effective luminescent area through the main apertures (Kim; FIG. 6), and a second dummy pattern area is formed outside the effective luminescent area through the first dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 16, the combined reference of Yamada, Mizuguchi and Kim disclose the method of claim 15, wherein at least one of the first dummy apertures is formed parallel to the main apertures, and at least another one of the first dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 17, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 15, wherein at least two organic EL devices are manufactured in a single process (Yamada; paragraphs 62-64), and the evaporation mask comprises at least two mask units (Mizuguchi; items 20, 26, and 28), through each of which the second electrodes of a single



Art Unit: 2879

organic EL device can be deposited, and a plurality of second dummy apertures (Mizuguchi; items 26 and 28) outside and adjacent to the outermost mask units in the direction in which tension is applied to the evaporation mask (Mizuguchi; see FIGS. 1-3).

Regarding claim 18, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 17, wherein the second dummy apertures are located outside the effective luminescent areas of the organic EL devices that are deposited by the outermost mask units adjacent to the second dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 19, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 17, wherein at least one of the second dummy apertures is formed parallel to the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 20, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 10, wherein at least two organic EL devices are manufactured in a single process (Yamada; paragraphs 62-64), the second electrodes are formed using an evaporation mask drawn taut by application of tension and having at least two mask units (Mizuguchi; items 20, 26, and 28), through which the second electrodes of the organic EL devices can be deposited, and the evaporation mask comprises a plurality of second dummy apertures outside and adjacent to outermost mask units in the direction in which tension is applied to the evaporation mask (Mizuguchi; see FIGS. 1-3).

Regarding claim 21, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 20, wherein the second dummy apertures are located outside the effective

Art Unit: 2879

luminescent areas of the organic EL devices that are deposited by the outermost mask units adjacent to the second dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 22, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 20, wherein at least one of the second dummy apertures is formed parallel to the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 23, Yamada discloses a method of manufacturing an organic EL device in figure 6, the method comprising: forming first electrodes (items 61R, 61G, 61b) for an organic EL device on a substrate (item 10); disposing an evaporation mask (item 100) to form an organic film over the substrate (paragraphs 62-63), but does not expressly disclose that the evaporation mask is drawn taut by application of tension and including at least two mask units each comprising a plurality of main apertures and a plurality of second dummy apertures formed outside and adjacent to outermost ones of the mask units in a direction in which tension is applied to the evaporation mask; forming the organic film comprising an effective luminescent area to cover at least the first electrodes by evaporating an organic material containing an organic luminescent material through the main apertures of each of the mask units; forming second electrodes on the organic film so that the effective luminescent area is formed at an area where the first and second electrodes overlap; and sealing the resulting structure, as claimed by Applicant.

Mizuguchi is cited to show an evaporation mask (item 16) in figures 1-3 that is drawn taut by application of tension (paragraphs 6-13) and having at least two mask units (items 20, 26, and 28), the mask unit comprising a plurality of main apertures (item 20) and a plurality of

dummy apertures (items 26 and 28) formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask, forming a first dummy pattern area (items 26 and 28) outside the effective luminescent area through the first dummy apertures.

Mizuguchi teaches that with the structure of the mask as described, that a proper electrode pattern can be obtained (paragraphs 6-13). Kim is cited to show an organic electroluminescent device with a second electrode formed on an organic film (paragraphs 78-79) and the structure is then sealed (item 40). Kim teaches that by using a deposition mask, damage can be prevented to layers, short-circuit prevented between layers, and preventing deterioration of layer characteristics (paragraphs 24-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yamada's invention to include the evaporation mask is drawn taut by application of tension and including at least two mask units each comprising a plurality of main apertures and a plurality of second dummy apertures formed outside and adjacent to outermost ones of the mask units in a direction in which tension is applied to the evaporation mask; forming the organic film comprising an effective luminescent area to cover at least the first electrodes by evaporating an organic material containing an organic luminescent material through the main apertures of each of the mask units; forming second electrodes on the organic film so that the effective luminescent area is formed at an area where the first and second electrodes overlap; and sealing the resulting structure as suggested by Mizuguchi and Kim for obtaining a proper electrode pattern and preventing damage to the device.

Regarding claim 26, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 23, wherein in forming the second electrodes, an evaporation mask to form

Art Unit: 2879

the second electrodes is disposed over the substrate, the evaporation mask drawn taut by application of tension and including at least two mask units (Mizuguchi; paragraphs 6-13 and items 20, 26, and 28), the mask units each comprising a plurality of main apertures (item 20) and a plurality of first dummy apertures (items 26 and 28) formed adjacent to the outermost main apertures in the direction in which tension is applied to the evaporation mask, the second electrodes are formed on each of the effective luminescent areas through the main apertures (Kim; FIG. 6), and a second dummy pattern area is formed outside each of the effective luminescent areas through the first dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 27, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 26, wherein at least one of the first dummy apertures is formed parallel to the main apertures, and at least another one of the first dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 28, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 26, wherein the evaporation mask comprises a plurality of second dummy apertures (Mizuguchi; items 26 and 28) outside and adjacent to the outermost mask units in the direction in which tension is applied to the evaporation mask.

Regarding claim 29, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 28, wherein the second dummy apertures of the evaporation mask are located outside the effective luminescent areas of the organic EL devices that are deposited by the outermost mask units adjacent to the second dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 30, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 28, wherein at least one of the second dummy apertures is formed parallel to

the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 34, Yamada discloses a method of manufacturing an organic EL device in figure 6, the method comprising: forming first electrodes (items 61R, 61G, 61B) on a substrate (item 10) in a predetermined pattern; forming an organic film (item 100) comprising an effective luminescent area to cover at least the first electrodes by evaporating an organic material containing an organic luminescent material, but does not expressly disclose disposing an evaporation mask to form second electrodes over the organic film, the evaporation mask drawn taut by application of tension and comprising a plurality of main apertures and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask; forming the second electrodes through the main apertures so that the effective luminescent area is formed at an area where the first and second electrodes overlap, and forming a second dummy pattern area outside the effective luminescent area through the first dummy apertures; and sealing the resulting structure, as claimed by Applicant.

Mizuguchi is cited to show an evaporation mask (item 16) in figures 1-3 that is drawn taut by application of tension (paragraphs 6-13) and having a plurality of main apertures (item 20), and a plurality of first dummy apertures (items 26 and 28) formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask, forming a first dummy pattern area (items 26 and 28) outside the effective luminescent area through the first dummy apertures. Mizuguchi teaches that with the structure of the mask as described, that a proper electrode pattern can be obtained (paragraphs 6-13). Kim is cited to

show an organic electroluminescent device with a second electrode formed on an organic film (paragraphs 78-79) and the structure is then sealed (item 40). Kim teaches that by using a deposition mask, damage can be prevented to layers, short-circuit prevented between layers, and preventing deterioration of layer characteristics (paragraphs 24-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yamada's invention to include an evaporation mask to form second electrodes over the organic film, the evaporation mask drawn taut by application of tension and comprising a plurality of main apertures and a plurality of first dummy apertures formed adjacent to outermost ones of the main apertures in a direction in which tension is applied to the evaporation mask; forming the second electrodes through the main apertures so that the effective luminescent area is formed at an area where the first and second electrodes overlap, and forming a second dummy pattern area outside the effective luminescent area through the first dummy apertures; and sealing the resulting structure as suggested by Mizuguchi and Kim for obtaining a proper electrode pattern and preventing damage to the device.

Regarding claim 35, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 34, wherein at least one of the first dummy apertures is formed parallel to the main apertures, and at least another one of the first dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 36, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 34, wherein at least two organic EL devices are manufactured in a single process (Yamada; paragraphs 62-64), and the evaporation mask comprises at least two mask units (Mizuguchi; items 20, 26, and 28), through each of which the second electrodes of a single

organic EL device can be deposited (Kim; FIG. 6), and a plurality of second dummy apertures (items 26 and 28) outside and adjacent to outermost ones of the mask units in the direction in which tension is applied to the evaporation mask.

Regarding claim 37, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 36, wherein the second dummy apertures of the evaporation mask are located outside the effective luminescent areas of the organic EL devices that are deposited by the outermost mask units adjacent to the second dummy apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 38, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 36, wherein at least one of the second dummy apertures is formed parallel to the main apertures of the mask units, and at least another one of the second dummy apertures is formed perpendicular to the main apertures (Mizuguchi; see FIGS. 1-3).

Regarding claim 53, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 10, but do not expressly disclose that a length of each of the first dummy apertures is equal to a length of each of the main apertures, as claimed by Applicant. It would have been obvious to one with ordinary skill to have the length of each of the first dummy apertures is equal to a length of each of the main apertures, since such a modification would have involved a mere change in the size of a the apertures. A change in size is generally recognized as being within the level of ordinary skill in the art. Furthermore, Applicant has not disclosed that if the lengths are equal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with uneven lengths.

Regarding claim 54, the combined reference of Yamada, Mizuguchi, and Kim disclose the method of claim 34, but do not expressly disclose that a length of each of the first dummy

Art Unit: 2879

apertures is equal to a length of each of the main apertures, as claimed by Applicant. It would have been obvious to one with ordinary skill to have the length of each of the first dummy apertures is equal to a length of each of the main apertures, since such a modification would have involved a mere change in the size of a the apertures. A change in size is generally recognized as being within the level of ordinary skill in the art. Furthermore, Applicant has not disclosed that if the lengths are equal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with uneven lengths.

Claims 52 and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuguchi et al. (JP 10-008239)

Regarding claim 52, Mizuguchi discloses the evaporation mask of claim 1, but does not expressly disclose that a length of each of the first dummy apertures is equal to a length of each of the main apertures, as claimed by Applicant. It would have been obvious to one with ordinary skill to have the length of each of the first dummy apertures is equal to a length of each of the main apertures, since such a modification would have involved a mere change in the size of a the apertures. A change in size is generally recognized as being within the level of ordinary skill in the art. Furthermore, Applicant has not disclosed that if the lengths are equal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with uneven lengths.

Regarding claim 55, Mizuguchi discloses the evaporation mask of claim 49, but does not expressly disclose that a length of each of the at least one first dummy aperture is equal to a length of each of the at least one main aperture, as claimed by Applicant. It would have been



obvious to one with ordinary skill to have the length of each of the first dummy apertures is equal to a length of each of the main apertures, since such a modification would have involved a mere change in the size of a the apertures. A change in size is generally recognized as being within the level of ordinary skill in the art. Furthermore, Applicant has not disclosed that if the lengths are equal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with uneven lengths.

Regarding claim 56, Mizuguchi discloses the mask unit of claim 51, but does not expressly disclose that a length of the dummy aperture is equal to a length of the main aperture, as claimed by Applicant. It would have been obvious to one with ordinary skill to have the length of each of the first dummy apertures is equal to a length of each of the main apertures, since such a modification would have involved a mere change in the size of a the apertures. A change in size is generally recognized as being within the level of ordinary skill in the art. Furthermore, Applicant has not disclosed that if the lengths are equal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with uneven lengths.

### ***Response to Arguments***

Applicant's arguments filed May 21, 2007 have been fully considered but they are not persuasive. The Examiner respectfully disagrees with Applicant's arguments. The Examiner first points to figures 1-3, which shows a thin film (item 16). Mizuguchi discloses that the thin film is 0.3 mm (paragraph 33). Applicant has not provided a special definition or specific thickness that defines a "thin film". Hence, Mizuguchi clearly discloses the thin film. The

Art Unit: 2879

Examiner now points to paragraph 6-12, which discloses the means for solving stated problems of the invention. The deformation process, as disclosed by Mizuguchi, is similar to Applicant's claimed limitation of "drawing taut by application of tension. Regarding the plurality of dummy apertures, the Examiner points to figures 1-4. The Examiner notes that there is a plurality of apertures in the Mizuguchi device. Since a plurality of apertures, any number of them can correspond to the first or second dummy apertures. Hence, Applicant's claims are met by the rejection set forth.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012. The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nkW

  
9/4/07

  
SIKHA ROY  
PRIMARY PATENT EXAMINER